# N. A. C. A. BULLETIN

*Section I*

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## Cost Accounting and Budgetary Practice

By

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### Editorial Department Note

Our Official Bulletin of October 1 was devoted to a brief exposition of the philosophy on which rest the preparation and administration of the budget. The current publication deals with some suggestions for budgetary control and shows some of the report forms found useful in budgetary practice. The material is based on a talk given last spring before the members of the Hartford Chapter at the time of one of their plant visitation meetings.

The author, Mr. F. C. Bennett was born in Franklin, New York, and was graduated from Colgate Academy and Colgate University. After graduation he spent two years studying factory management, production, cost and payroll systems with the Columbia Graphophone Company, Remington Typewriter Company, Sargent & Company and Stanley Works. After a short time as manager of a small printing plant, he entered the employ of the Remington Arms, U.M.C. Company, Bridgeport.

At the beginning of the war, he took a position with the Marlin Rockwell Corporation, New Haven, in charge of factory costs. For the past seven years, he has been with the Fuller Brush Company, Hartford, Connecticut, in charge of costs.

Mr. Bennett has served as secretary of the Hartford Chapter of the National Association of Cost Accountants.

## COST ACCOUNTING AND BUDGETARY PRACTICE

Cost accounting has had a very natural and logical growth. Before taking up with you the subject of this paper, treating of some problems of the budget, I should like to review briefly the evolution of cost accounting.

Some twenty years ago, cost accounting was first taking root. It grew rather slowly until the last five years, when it suddenly began to quicken into action and development and make some really worth-while progress. Incidentally, I believe that in great measure, this has been due to the untiring efforts of the National Association of Cost Accountants. The growth of cost accounting has been in the main parallel with the growth of business. And indeed, the statement may be taken literally, for until recently cost accounting and business have been running side by side, but equidistant at all times. Within the last five years they have begun to converge and in the future cost accounting will oftentimes be found even to precede manufacturing.

We have only to go back a comparatively few years to find the one-man business, where the sole owner and manager kept, in his head, most of the figures pertaining to the business. The growth of business required this same man to have some accounting records, but he accounted only for those things which were absolutely necessary. If he wanted to know approximately what his product cost,

he went out to the factory floor and got the best estimate which the foreman, from his own memory and experience, could give. As business grew and production increased, he found it necessary to put into the business more capital in order to purchase more equipment and raw material. To secure the necessary capital, he often had to take in a partner. The business had grown from a one-man affair to a partnership business. As soon as it became a partnership business the trials of the foreman were increased twofold, for he had two owners to satisfy instead of one.

Obviously some sort of a man was needed who would make it his business to supply the management with all figures as they related to the internal working of the organization. The cost man was brought in for that very purpose.

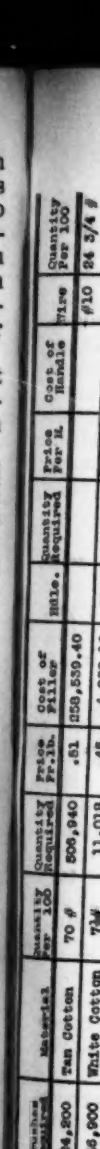
While great progress has been made in cost work, the fact still remains that in the early years the cost accountant was like a blind man groping around a dark room looking for a black cat. There was no precedent to go by; he had to find out for himself what figures were essential, how to get and how to present them. It has taken some years and a great many mistakes to sift this all out but it has been accomplished.

Therefore, today, business has grown from a one-man business, through a partnership, to a corporation. And it is in connection with this last form of development of business, the corporation, that the cost accountant has become a very necessary factor in its conduct. The importance of efficiency in business has never been so generally recognized by managers as at the present time, and there is promise of even greater development in the future. From the standpoint of economics, such a development must come; for the development of natural resources, the increase in population, and the higher standards of living, all demand a greater business efficiency. As I see it, it is the one essential duty of the cost accountant to furnish the management with information that will make for this greater business efficiency.

In order to be of the utmost assistance, the cost man must present to the management figures that will lead him well in advance of his daily work. The cost man in bussiness must occupy the same position that the architect occupies in building. No one of us would start out to build a house or a factory, or any other building, no matter how small, without first going to an architect to get our plans on paper, to make sure we will have, when finished, just what we have planned in our mind. We want to see how it is going to look; we want to know how much it is going to cost; we want to cut the cost here and perhaps add to the cost in another place; it is cheaper to do the experimenting in the plan, of course, than in the structure. The ultimate result is a blueprint of our building, a picture with complete specifications covering every detail of structure and cost. We know the whole story before we break ground for the building.

It is a similar blueprint that the cost man should lay before the





| | | Brushes Required | Material | Quantity Per 100 | Quantity Required | Price Pr.lb. | Cost of Filler | Hdle. | Quantity Required | Price Per M. | Cost of Handle | Wire | Quantity Per 100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 102 | Wonder Mop | 724,200 | Tan Cotton | 70 # | 506,940 | .51 | 258,539.40 | | | | | #10 | 24 3/4 # |
| 105 | Dish Mop | 146,900 | White Cotton | 7½# | 11,018 | .45 | 4,958.10 | #18 | 146,900 | 9.28 | 1,363.23 | #12 | 5 15/16# |
| 106 | Wet Mop | 454,900 | White Cotton | 62½# | 284,313 | .45 | 127,940.85 | | | | | #9 | 18 1/2 # |
| 112 | Wonder Duster | 510,800 | Tan Cotton | 41 # | 209,428 | .51 | 106,808.28 | #4 | 510,800 | 27.27 | 13,929.52 | #12 | 13 1/8 # |
| 113 | Stove Duster | 149,700 | Black Cotton | 20 # | 29,940 | .42 | 12,574.80 | #9 | 149,700 | 25.37 | 3,797.89 | #12 | 9 1/2 # |
| 115 | Dauber | 160,300 | Black Cotton | 6½# | 10,420 | .42 | 4,376.40 | #12A | 150,300 | 9.11 | 1,460.33 | #10 | 9 5/8 # |
| 117 | Shoe Polisher | 108,000 | Oyster Yarn | 18 # | 19,440 | .25 | 4,860.00 | #14 | 108,000 | 20.94 | 2,261.52 | #12 | 9 1/2 # |
| 118 | Scouring Mop | 385,800 | Copper Tangle | 5½# | 21,219 | 1.26 | 26,735.94 | #18 | 385,800 | 9.28 | 3,580.22 | #12 | 6# |

Form A



| Quantity Required | Price Pr.C.lb. | Cost Wire | Tags | Price Pr. M. | Cost of Tags | Screw Eyes | Cost Pr.M. | Cost of Scr.Eyes | Total Cost Matl. | Labor Per C. | Total Labor | % Burden | Burden | Total Amount |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 179,240 | 4.35 | 7796.94 | 724,200 | 1.56 | 1129.75 | | | | 226,910.89 | 2.96 | 21,436.32 | 125 | 26,795.40 | 275,142.61 |
| 8,722 | 4.77 | 416.03 | 146,900 | 1.56 | 229.16 | 146,900 | 1.01 | 148.37 | 7,004.71 | 1.61 | 2,365.09 | 125 | 2,956.36 | 12,326.16 |
| 84,157 | 4.56 | 3837.56 | 454,900 | 1.56 | 709.64 | | | | 129,644.92 | 4.53 | 20,608.97 | 125 | 25,758.71 | 176,010.60 |
| 67,043 | 4.77 | 3197.95 | 510,800 | 1.56 | 796.85 | 510,800 | 1.01 | 515.91 | 108,494.27 | 3.47 | 17,724.76 | 125 | 22,154.82 | 148,373.85 |
| 14,222 | 4.77 | 678.39 | 149,700 | 1.56 | 233.53 | 149,700 | 1.01 | 151.20 | 17,435.81 | 1.83 | 2,739.51 | 125 | 3,424.39 | 23,599.71 |
| 15,429 | 4.35 | 671.16 | 160,300 | 1.56 | 250.07 | 160,300 | 1.01 | 161.90 | 6,919.86 | 1.55 | 2,484.65 | 125 | 3,105.81 | 12,510.32 |
| 10,260 | 4.77 | 489.40 | 108,000 | 1.56 | 168.48 | 108,000 | 1.01 | 109.08 | 7,888.48 | 2.20 | 2,376.00 | 125 | 2,970.00 | 13,234.48 |
| 23,148 | 4.77 | 1104.16 | 385,800 | 1.56 | 601.85 | 385,800 | 1.01 | 389.66 | 32,411.83 | 1.43 | 5,516.94 | 125 | 6,896.18 | 44,824.95 |

Form A—Continued

management well in advance of beginning a period's operations. The title of this blueprint, coming from the cost man is the budget and, if properly and carefully prepared, will give the management guidance in the performance of its work, and a pretty definite idea of how its statement will look at the end of the accounting period. It serves the management in very much the same way in which the blueprint serves the builder. I firmly believe that no manager should attempt to start a period's work without this cost print or budget sheet before him. It is not the purpoe of this paper to treat of all the budgets necessary for the proper conduct of a business enterprise. However, there are two budgets in particular which the cost man should be instrumental in setting up and constantly checking, namely, the production budget and the expense budget.

### The Production Budget

Some time before the first of the year the department of sales establishes a sales quota for its field managers. From this sales quota the cost department establishes a manufacturing budget. This is done by analyzing these quotas according to departments which are to produce their respective shares of the goods. Each item produced in a department is considered separately and in detail.

For example, on Form A take the first item, 102 Wonder Mop. The quota requirements for a year are 724,200; the material used is tan cotton; and it requires 70 pounds per hundred. From this we figure that the total requirements for a year on this item are 506,940 pounds of tan cotton @ $.51 per pound which will cost $258,539.40. The item uses 24¾ pounds of No. 10 wire per hundred, or 179,240 pounds @ $4,35 per 100 pounds, which gives us a wire cost of $7,796.94. The same procedure is carried out in detail for tags, screw eyes, and in fact for every article of raw material that goes into the making of the finished product. Each is figured separately and the whole material cost is combined in the "total cost of material" column.

The next column is the labor cost per hundred pieces, established on prevailing piece work prices, which multiplied by the required pieces for the year, gives us our total labor cost for the year on this item.

From the burden percentage in the next column we arrive at the total amount of burden. Adding together the total material cost, the total labor cost, and the total burden cost, we arrive at the total plant cost of this one item for a year's requirements.

This same detail is followed through for each item which is to be manufactured in this particular department. Chart B, pages 117-118, summarizes all these requirements. We find that 716,368 pounds of tan cotton, 295,331 pounds of white cotton, 40,360 pounds of black cotton, 19,440 pounds of oyster yarn, 21,219 pounds of copper tangle are required at a total cost of $546,793.77. The same procedure is followed for each size of handle, wire and miscellaneous

items. Thus we find that there are a total material requirement of $596,973.52; a total labor of $75,250.24; and a total burden to be applied of $94,061.67.

This same procedure is followed in each department for every article manufactured. The whole is then summarized and placed before the management as a guide for the coming year. From this plan the finance committee has an outline of the money requirements to plan for. The purchasing department is furnished with a detailed list of every item of raw material required. In this production budget the production control department finds its schedule laid out; the stores department knows what to plan for in storage for the coming year. In fact, this budget is a general plan or outline for the guidance of every department that has to do with the manufacture of the finished or semi-finished product.

**BUDGET ESTIMATE**

Department Number

Department Name

Department Head

Year

| | | DO NOT WRITE IN THESE SPACES | |
|---|---|---|---|
| Actual Expense | | | |
| Appropriation Requested | | | |
| INCREASE—DECREASE | | | |

EXPLAIN BELOW ANY INCREASE OR DECREASE

Signed _____ DEPARTMENT HEAD

Approved _____ Date _____

RECOMMENDATION BY COMPTROLLER

_____ COMPTROLLER

Appropriation by Executive Committee $_____ Date _____

Form C—Front

## Requirements—Cotton Division

| | | | | | |
|---|---|---|---|---|---|
| *Cotton | | | | | |
| Tan..... | 716,368 lbs. | @ | .51 | $365,347.68 | |
| White..... | 295,331 " | @ | .45 | 132,898.95 | |
| Black..... | 40,360 " | @ | .42 | 16,951.20 | |
| Oyster Yarn... | 19,440 " | @ | .25 | 4,860.00 | |
| Copper Tangle. | 21,219 " | @ | 1.26 | 26,735.94 | |
| | | | | | $546,793.77 |
| Handles | | | | | |
| No. 4 ..... | 510,800 lbs. | @ | 27.27 | $13,929.52 | |
| 9 ..... | 149,700 " | @ | 25.37 | 3,797.89 | |
| 12A ..... | 160,300 " | @ | 9.11 | 1,460.33 | |
| 14 ..... | 108,000 " | @ | 20.94 | 2,261.52 | |
| 18 ..... | 532,700 " | @ | 9.28 | 4,943.45 | |
| | | | | | 26,392.71 |

*Dying charge, $45,605,48, is included in above schedule.

Chart B

| DETAIL NAME AND NUMBER | 10 Periods this Year | Average per Period | Yearly Rate | REMARKS |
|---|---|---|---|---|
| | | | | |
| TOTALS | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Wire** | | | | | |
| 9 ..... | 84,157 lbs. | @ | 4.56 | $3,837.56 | |
| 10 ..... | 194,669 " | @ | 4.35 | 8,468.10 | |
| 12 ..... | 123,395 " | @ | 4.77 | 5,885.93 | |
| | | | | | 18,191.59 |
| **Miscellaneous** | | | | | |
| Tags..... | 2,640,600 lbs. | @ | 1.56 | $4,119.33 | |
| Screw Eyes.... | 1,461.500 " | @ | 1.01 | 1,476.12 | |
| | | | | | 5,595.45 |
| Total Material ..... | | | | | $596,973.52 |
| Total Labor ..... | | | | | 75,250.24 |
| Total Burden ..... | | | | | 94,061.67 |
| Total Cost ..... | | | | | $766,285.43 |

Chart B—Continued

| ESTIMATE IN THESE COLUMNS YOUR BUDGET FOR NEXT YEAR | | | | | DO NOT WRITE IN THESE SPACES | | |
|---|---|---|---|---|---|---|---|
| ✓ | Period Estimate | Yearly Estimate | INCREASE | DECREASE | REMARKS | | | ✓ |
| | | | | | | | | |

## The Expense Budget

At least a month before the close of the year each department head is given an expense budget blank, Form C, to fill out and return to the comptroller. Turning to the last page of the Form C you will find spaces to list foremen and assistants, together with all non-productive workers, with their present weekly wage, proposed weekly wage, amount of increase or decrease, with explanation for same. On the second and third pages of Form C—the inside—is space to estimate expense materials under their detailed numbers which the department head has reason to believe he will require for the year. As a guide for this he is furnished with a detailed account of his expenses for the last ten periods. With the blank thus far completed, we turn now to the front page where the total expense is summarized. The blank is then signed and returned to the comptroller, who checks it and turns it over to the executive committee to approve and grant the appropriation.

A copy of the budget estimate is made and sent to the department head for his reference. At the close of each period thereafter

**PAY ROLL**

| | NAME | Weekly Present | Weekly Proposed | Increase Requested | EXPLANATION | No. not Work in Some Room |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 34 | | | | | | |
| 35 | | | | | | |
| 36 | | | | | | |
| 37 | | | | | | |
| 38 | | | | | | |
| | TOTALS | | | | | |

Form C—Back

the department head receives an expense statement and budget comparison, Form D. On this form he gets his experience, itemized, for the past period and cumulative to date. This has already been checked with his budget allowance and marked whether over or under the budget for the period and cumulative to date.

Route to

Dept. No. 418

DEPARTMENT HEAD'S

**Expense Statement and Budget Comparison**

Period Ended

Name of Department PAINTERS' DEPARTMENT

| No. | NAME OF DETAIL | Current Period | | Cumulative To Date | | REMARKS |
|---|---|---|---|---|---|---|
| | Expenditures | | | | | |
| 1. | Clerical & Supervisory Salaries | | | | | |
| 2. | Non-Productive General Labor | | | | | |
| 3. | Idle Time of Productive Workers | | | | | |
| 4. | Bonus | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 21. | Printed Matter | | | | | |
| 23. | Small Tools | | | | | |
| 24. | Other Supplies | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 42. | Local Subsistance | | | | | |
| 43. | Travel | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 61. | Employees' Welfare | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 71. | Insurance | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | TOTALS | | | | | |

Your Budget Allowance is $ _____ for the Period, and $ _____ to date, you are therefore $ _____ {over / under} for the Period, and $ _____ {over / under} for the year to date

Form D

There is one more blank that should be sent to the heads of departments, the capital expenditure budget blank, Form E. This blank is for the purpose of itemizing extra equipment that may be needed to carry out the year's program and which naturally is a part of the budget.

**CAPITAL EXPENDITURES BUDGET**

Dept. Name _____ Dept. Head _____ Department Number _____ Year _____

List of equipment to be required:

| Quantity | Items | Estimated Cost |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | TOTAL | |

Signed _____ Dept. Head

Recommendation of Comptroller: Approved _____

Signed _____ Comptroller

Appropriation of Executive Committee $ _____ Date _____

## Advantages of a Budget System

As I have previously stated, the carefully worked out budget will give to the general management a clear picture of the business for a fixed period in advance, enabling them at all times to work ahead of the plant's daily activities. The same condition is true for the purchasing agent, the production man and the stores keeper. In fact, all the general executives are thus able to look into the future and plan accordingly, while the minor executives and foremen take care of the details of the day.

Form D, as it goes out to department heads each period, carries not a perfunctory message but one of very lively interest. At the beginning of the budget period the department head was taken into the confidence of the management and asked to make an estimate of the cost of running his department. In return for this confidence he gave the management the best possible estimate for his future expenses. Form D, his score card, has now come to him. What kind of a score did he make for the period? Is the management still justified in placing confidence in his ability? Form D brings that definite message to him, as it can be brought home in no other way. Even though it is over or under the estimate, the executive will soon begin to analyze each item of expense for himself to see if it was really justified. In a great many cases he will probably find that it was not justified. After analyzing some of his smaller expenses he will turn to his foremen and non-productive help to see if they can justify their expenditures. Here, too, he will find that some things are being done that are not necessary—perhaps a duplicate of work or he may find that he has an extra man who is doing work that could just as well be divided among other men and the extra man eliminated. With a little reorganization he will find he can eliminate work, men, and expense—all bringing about more efficient results. In fact, the more he watches and compares Form D with his original budget estimate, the more he begins to manage his department as though it were his own individual shop.

Such experiences as these are not at all uncommon. In fact, my own experience has shown me that these are every day happenings in organizations that are run on a rigid budget system. And these are only the beginnings of efficiency that the system will bring out.

## The Production Budget Check

Form F is a sheet for the purpose of checking the production budget. This sheet is made out for each complete article made for sale. On it are shown the name and number of the article, the raw materials—with their sizes—that go into the article, and the operations and prices of labor. Here also are found the material cost, labor cost, burden cost per hundred pieces, the total plant cost, the retail selling cost, the material, labor, and burden costs reduced to percentage form, the actual material and cost of material used,

Quantity Per Lot 200 Name Tan Yonder Hop No. 102

| MATERIAL REQUIRED | Amt. 1925 | Amount Per 100 | Oper. No. | OPERATION | 1. Price | 2. Price | 3. Price | 4. Price | 5. Price |
|---|---|---|---|---|---|---|---|---|---|
| Kind or Material | | | 1 | Weight | .25 | | | | |
| Tan Cotton | | 58½# | 2 | Cut | .08 | | | | |
| Original Size | | | 4 | Twist (Semi-Auto) | .25 | | | | |
| Cut 7. Inches Long | | | 5 | Trim | .36 | | | | |
| Pieces Cut | | | 6 | Bend (Machine) | .15 | | | | |
| Articles Obtained from Cut | | | 7 | Clip | .10 | | | | |
| Articles Obtained from Original Size | | | | | | | | | |
| 2 No. 10 Wire 31 Inches Long | | 24½# | | | | | | | |
| Handles | | | | | | | | | |
| Bows | | | | | | | | | |
| Brass Eye | | | | | | | | | |
| Tags | | 100 | | | | | | | |
| Ferrule | | | | | | | | | |
| Screws | | | | | | | | | |
| Cups | | | | | | | | | |
| Collars | | | | | | | | | |
| Rivets | | | | | | | | | |
| Pairs Assembled | | | | | | | | | |
| Trademark Tape 7" | | 700" | | | | | | | |

STANDARD COST

| | Amt. 1925 | Period 1. | Period 2. | Period 3. | Period 4. | Period 5. | Period 6. | Period 7. | Period 8. | Period 9. | Period 10. | Period 11. | Period 12 | Period 13. | Amt. 1926 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Cost Per 100 | 31.14 | 27.17 | 26.22 | 26.20 | 25.27 | 26.29 | | 30.39 | 27.47 | 26.28 | | | | 24.06 | 26.65 |
| Labor Cost Per 100 | 2.21 | 1.12 | 1.17 | 1.01 | 1.00 | .99 | | 1.12 | .79 | .75 | | | | 1.56 | 1.06 |
| Burden Cost Per 100 | 4.29 | 5.00 | 6.00 | 6.00 | 7.00 | 7.00 | | 7.00 | 7.00 | 7.00 | | | | 6.00 | 6.32 |
| Total Plant Cost Per 100 | 38.34 | 33.29 | 33.39 | 33.21 | 33.27 | 34.28 | | 38.51 | 35.26 | 34.03 | | | | 30.67 | 33.98 |
| Retail Selling Price Per 100 | | 250.00 | 175.00 | 275.00 | 175.00 | 175.00 | 175.00 | 175.00 | 225.00 | 225.00 | 225.00 | 225.00 | 225.00 | 225.00 | |
| % of Material to P. C. | 81.3 | 81.6 | 78.5 | 78.9 | 75.9 | 76.7 | | 78.9 | 77.9 | 77.2 | | | | 78.5 | 78.2 |
| % of Labor to P. C. | 5.7 | 3.4 | 3.5 | 3 | 3 | 2.9 | | 2.9 | 2.2 | 2.2 | | | | 5.2 | 5.1 |
| % of Burden to P. C. | 13 | 15 | 18 | 18.1 | 21.1 | 20.4 | | 18.2 | 19.9 | 20.8 | | | | 16.3 | 16.7 |
| Aver Lbs. of Mtl. Per 100 | 58.24 | 60.03 | 47.79 | 58.67 | 58.28 | 59.04 | | 69.44 | 61.54 | 58.75 | | | | 56.50 | 58.7 |
| Mtl. Cost Per Lb. | .4364 | .42889 | .42301 | .4207 | .4202 | .42185 | | .42304 | .42509 | .42509 | | | | .42098 | .4214 |
| Mtl. Cost Per Bdl. | | | | | | | | | | | | | | | |
| Burden % | 248 | .05 | 6 | .06 | .07 | .07 | | 7 | 7 | 7 | | | | 6 | .06 |
| Manufactured | | 63255 | 49302 | 91611 | 77424 | 5989 | | 2500 | 2100 | 400 | | | | 1000 | 293 98 |
| Sold | | 42421 | 58477 | 72885 | 75348 | 85404 | 42161 | 33001 | 9743 | 2391 | 2119 | 2662 | | | |
| Inventory, | | 240 598 | 131422 | 149308 | 151468 | 92047 | 49886 | 31229 | 25586 | 21595 | 19433 | 16775 | | | |

Form F—Front

with the amount of burden the item carries. Here also are shown the total pieces manufactured, sold, and in inventory. All of this information is itemized according to periods—this particular system calls for a thirteen period year. On the reverse side of the sheet—Form F—is a time study by periods of each operation, showing the pieces per hour produced and the rate per hour paid the workmen. This is made up from the time cards. Thus by looking at this sheet we have at a glance the complete history of this particular article, with figures from the previous year and previous period for comparison.

Quantity Per Lot 200 Name Tan Wonder Mop No. 102

| OPERATION | | Aver. 1925 | Person 1. | Person 2. | Person 3. | Person 4. | Person 5. | Person 6. | Person 7. | Person 8. | Person 9. | Person 10. | Person 11. | Person 12. | Person 13. | Aver. 1926 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Weight | 1. | 245 | | | | | | | | | | | | | | |
| | 2. | .72 | | | | | | | | | | | | | | |
| 2 Cut | 1. | 797 | | | | | | | | | | | | | | |
| | 2. | .78 | | | | | | | | | | | | | | |
| 3 Twist 4 (Semi Auto) | 1. | 139 | 363 | 260 | 363 | 410 | | | 379 | 382 | 364 | | | | 345 | 358 |
| | 2. | .88 | .94 | .66 | .90 | 1.03 | | | .95 | .96 | .91 | | | | .86 | .90 |
| 5 Trim | 1. | 184 | | | | | | | | | | | | | | |
| | 2. | .71 | | | | | | | | | | | | | | |
| Bend 6 (Machine) | 1. | 291 | 615 | 530 | 558 | 649 | 600 | | 641 | 677 | 667 | | | | 667 | 623 |
| | 2. | .77 | .92 | .80 | .83 | .97 | .90 | | .96 | 1.02 | 1.00 | | | | 1.00 | .93 |
| 7 Clip | 1. | 686 | 632 | 640 | 685 | 779 | 645 | | 735 | 778 | 667 | | | | 526 | 676 |
| | 2. | .68 | .63 | .64 | .69 | .78 | .65 | | .74 | .78 | .67 | | | | .53 | .68 |
| Clean and 14 Inspect | 1. | 106 | 96 | 89 | 99 | 98 | 99 | | 95 | 183 | 182 | | | | 135 | 117 |
| | 2. | .62 | .58 | .56 | .60 | .60 | .46 | | .47 | .47 | .45 | | | | .46 | .49 |
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Form F—Reverse

Thus the budget serves as a definite, detailed plan of operations for the future. A comparison of actual performance with that forecast by the budget provides a powerful instrument of control for the planning and operating executives of the business.